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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KITOV, ZEEV V

ART UNIT

PAPER NUMBER

2836

NOTIFICATION DATE

DELIVERY MODE

12/08/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

tammy@ppglaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/584,659	<b>Applicant(s)</b> THULIN, ANDERS	
	<b>Examiner</b> ZEEV KITOV	<b>Art Unit</b> 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 4, 6 - 10 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

Examiner acknowledges a submission of the amendment and arguments filed on September 4, 2008. Claims 2 and 6 are amended. A new Office action follows.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Poli et al. (US 5,280,979). Regarding Claim 1, Poli et al. discloses following: a device for the dissipation of electricity from an object, the device comprising at least one equivalent highly conductive contacting means, i.e. pick-up tip part including cylindrical body (1 in Fig. 1 and 2A, col. 2, lines 13 – 17) intended to be applied in contact with the object and to be connected to a dissipation point capable of dissipating electric current, as shown in Fig. 3, and a low conductive material, i.e. resistor (4 in Fig. 2A, col. 2, lines 45 - 65) for slow dissipation of current from the, wherein during use, for safe dissipation of static electricity from the object, the contacting equivalent means is connected to the dissipation point via the low conductive material (resistor), such that when the contacting means is applied into contact with the object the current is first dissipated from the object over to the highly conductive equivalent contacting means, then through

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the low conductive material, and finally to the dissipation point, wherein the formation of sparks is avoided (col. 1, line 19 – 33).

Regarding Claim 6, Poli et al. disclose least one of the contacting means, comprises at least one metal part of a relatively low mass, i.e. a wire connecting the resistor (4 in Fig. 2A, col. 1, line 19 – 33).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poli et al. in view of Siegel (US 5,246,157) and Han et al. (US 5,708,552). Regarding Claim 2, Poli et al. disclose the low conductive material (see Claim 1 rejection above). However, it does not disclose the device as tweezers having two arms. Siegel discloses the device being formed as a clamp (Fig. 1) having two opposite conductive contacting means (21 in Fig. 1, col. 11, line 1), which are biased against each other by means of a spring (9 in Fig. 1), two mutually hinged arms connected to respective contacting means (21 in Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the Poli et al. device according to teachings of Siegel, i.e. by forming the two arm tweezer, because according to Siegel, such device may be used for both insertion and removal of electronic parts together with heating for soldering and

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detachment of the electronic parts. Siegel further discloses connecting cable. However, the cable is used for delivery of power to the soldering tools rather than for dissipation of the electrostatic charge. Han et al. disclose the ESD protection system using the grounding cable (11 in Fig. 1) for physical grounding the electrostatic discharge from electronic parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the grounding cable to the tweezers of Poli, because a particular technique of providing physical grounding for the ESD protection was recognized as part of the ordinary capabilities of one skilled in the art. In the Poli device modified according to teachings of Siegel and Han et al., at least one of the contacting means contacting the treated object is connected to the dissipation cable via the low conductive material.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poli in view of Lodini (US 4,977,386). Claim 7 requires the low conductive material being formed as an insulating matrix and a conductive additive. Lodini discloses the resistive element being formed as a supporting insulating matrix (1 in Fig. 1) and an electrically-conductive material (2 in Fig. 1) distributed uniformly inside the matrix (col. 2, lines 56 – 68). Such method of forming the resistor has an advantage, since according to Lodini, an actual value of resistance can be achieved by varying an amount of pressure on the element, while normally the resistance depends on variety of factors such as chemical composition of the resistive matter and its physical dimensions. Controlling all these factors is a rather complex task. It would have been obvious to one of ordinary skill in

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the art at the time the invention was made to modify the Poli et al. device according to teachings of Lodini, because such resistive element would provide a number of advantages: (1) the resistor is being fully integrated with the tip of Poli et al. rather than embedded as in Poli et al. device, (2) the value of the resistor can be controlled and if necessary adjusted at the time of manufacturing and (3) the Lodini manufacturing process is simpler than other alternatives and may use materials with a wide range of specific resistance values, and (4) both technologies, i.e. forming the plastic clip of Hoffman and forming the resistor of Lodini are well known in the art; therefore, such modification is nothing but application of a known technique to a known device ready for improvement to yield predictable results.

Claims 3, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poli et al. in view of Siegel, Han et al. and Lodini. Regarding Claim 3, in the Poli et al. device modified according to teachings of Siegel and Lodini, at least one of the arms is made of the low conductive material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Poli et al. in view of Siegel device according to teachings of Lodini, because such resistive element would provide a number of advantages: (1) the resistor is being fully integrated with the tip of Poli et al. rather than embedded as in Poli et al. device, (2) the value of the resistor can be controlled and if necessary adjusted at the time of manufacturing and (3) the Lodini manufacturing process is simpler than other alternatives and may use materials with a wide range of specific resistance values, and (4) both technologies, i.e. forming the

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plastic clip of Hoffman and forming the resistor of Lodini are well known in the art; therefore, such modification is nothing but application of a known technique to a known device ready for improvement to yield predictable results.

Regarding Claim 4, Poli et al. disclose the interior part of the low conducting material (4 in Fig. 2A) and an exterior part of an insulating material (3 in Fig. 1 and 2A, col. 2, lines 60 – 61) surrounding the interior part. In the Poli et al. device modified according to teachings of Siegel, at least one arm is designed according to the claim language.

Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poli et al. in view of Lodini and Nakamura (JP 410273639). Regarding Claim 9, Lodini discloses variety of material, which may be used in his resistive element, a silicon rubber, epoxy resin etc., since according to Lodini, the material of matrix may be any type of electrically-insulating material, providing it is flexible enough to flex when a given pressure is applied on the resistor. And further: materials such as natural and synthetic rubber, or numerous types of synthetic thermoplastic resins and, in particular, silicon rubber and epoxy resin, may be employed (col. 3, lines 18 – 43). Nakamura discloses electroconductive (resistive) element formed as an insulative matrix with a metal powder, while the matrix is formed from polyamide (see Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made substitute the materials recited by Lodini, such as silicon rubber or epoxy resin by polyamide according to teachings of Nakamura, because according to Lodini, type of electrically-

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insulating sufficiently flexible material may be used and therefore replacement of one polymer for another because it is nothing but simple substitution of one known equivalent for another to obtain predictable results.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poli et al. in view of and Masuda (US 3,705,324). As per Claim 10, it differs from Claim 1 rejected above by its limitation of the low conductive material being a ceramic material. Masuda discloses the grounding path for the colliding electrons being provided by using a relatively low resistivity ceramic base 1 having conductivity of the order of about  $3 \times 10^5$  to  $10^8$  ohm-cm (col. 3, line 28 – 40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the resistor of Poli et al. by the relatively low resistivity ceramic element according to teachings of Masuda, because (1) Masuda element is used for discharge of electricity to ground, and (2) replacement of the resistor of Poli et al. by the ceramic element of Masuda is a simple substitution of one known equivalent element for another to obtain predictable results.

### ***Allowable Subject Matter***

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. A reason for that is that the claim recites at least one arm provided with an interior part of an insulating material and an exterior cover of the



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low conducting material. Such limitation has not been found in the collected prior art record.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zeev Kitov whose current telephone number is (571) 272 - 2052. The examiner can normally be reached on 8:00 – 4:30. If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272 – 2800, Ext. 36. The fax phone number for organization where this application or proceedings is assigned is (571) 273-8300 for all communications.

/Stephen W Jackson/

Primary Examiner, Art Unit 2836